

# **VALUE ENGINEERING STUDY**

Project: STP00-5005-00(004) Montgomery Toombs
Pl No.: 550610
SR 292/Vidalia Widening and Reconstruction

Conducted on December 10, 2012

By

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#### I. INTRODUCTION

#### **GENERAL**

This Value Engineering report summarizes the results of the Value Engineering study performed on December 10, 2012.

The scope of the Value Engineering study was limited to a review of common recommendations from similar types of projects.

#### **VALUE ENGINEERING METHODOLOGY**

The Value Engineering Study followed the basic Value Engineering procedure for conducting this type of analysis.

This process included the following phases:

- 1. Investigation
- 2. Speculation
- 3. Evaluation
- 4. Development
- 5. Presentation (Report Preparation)

Evaluation criteria identified as a basis for the review of recommendations included the following:

- Constructability
- Environmental Impacts
- Delay of project
- Cost of Redesign
- Relevancy to need and purpose of project



## II. INVESTIGATION PHASE

#### PROJECT INFORMATION

Project Number: STP00-5005-00(004

County: Montgomery Toombs

PI No.: 500610

Proposed Letting: April 2013

Right of Way has already been acquired.

PE Cost: 773,239

ROW Cost: 2,000,000

Construction Cost: 5,847,318

<u>Utilities 1,550,572</u>

TOTAL \$10,171,129

Project Length: 4.4 KM

Functional Classification: Urban Minor Arterial

Project Designation: Full Oversight

Traffic ADT: 9350 (2014)

14,950 (2034)

% Trucks: 4

Speed Design: 70/55 KMH

Bridge Work Required: No

Date of PFPR: 3/14/2006 Date of FFPR: 5/23/2012

A Cost Estimate update was submitted on November 30, 2012. The total project cost reached the \$10 million threshold for VE due to the cost estimate revision. It should be noted that the actual cost of the ROW acquired is only \$1 million, not the \$2 million shown in the estimate. This would bring the total project cost down below the \$10 million VE threshold. Design of Project is 100% complete and FFPR has already been held.



#### III. SPECULATION PHASE

Common recommendations that might apply to this project generated utilizing brainstorming method:

- A. 11 foot lanes
- B. Adjust vertical profile to minimize earthwork and/or utilize existing pavement
- C. Narrow or eliminate sidewalks
- D. Eliminate two way left turn lane

### IV. EVALUATION PHASE

#### A. 11 foot lanes

This project has relatively low traffic and truck volumes; however, the design is complete and ROW has been purchased. The cost to redesign the project at this stage would negate any savings. Savings would be limited to pavement since right of way has already been acquired.

- B. Adjust vertical profile to minimize earthwork and/or utilize existing pavement This does not apply since this project is mostly an overlay of the existing pavement.
- C. Narrow or eliminate sidewalks
  Sidewalks have been included in the urban sections of the project. There is a truck stop, high school, and industrial area within the project limits.
- D. Eliminate the two way left turn lane

  Traffic volumes are appropriate for a three lane section. A truck stop, industrial area and a high school generate traffic through the corridor.

#### V. DEVELOPMENT PHASE

No items were considered for development. The suggested recommendations are not consistent with the need and purpose of this project.

# VI. CONCLUSION

Right of Way has already been purchased. Final design has been completed. When calculating total project cost using the actual cost of the required ROW, the total project cost is below the \$10 million threshold. Any changes to the project would delay the project and not add any additional value.

